

**REMARKS**

In the Office Action mailed July 27, 2004, claims 5, 6, 8, 16 and 17 were rejected under 35 U.S.C. § 112. Claim 20 was rejected under 35 U.S.C. § 112 as being indefinite. Claims 1-12 were rejected under 35 U.S.C. § 102(b) as being anticipated by Chartrand (2,426,388). Claims 13-20 were rejected under 35 U.S.C. § 103 as being unpatentable over Chartrand (2,426,388) in view of Halverson et al (4,763,791). Claims 21-23 were rejected under 35 U.S.C. § 103 as being unpatentable over Chartrand (2,426,388) in view of Halverson et al (4,763,791), and in further view of Bublewitz et al. (2002/0156186). Claim 24 was rejected under 35 U.S.C. § 103 as being unpatentable over Chartrand (2,426,388) in view of Halverson et al (4,763,791), and Bublewitz et al. (2002/0156186), in further view of Jagmin (5,044,955). In view of the remarks below, applicants submit that all claims are in a condition for allowance.

**The Section 112 Rejections**

Claims 5, 6, 8, 16 and 17 were rejected under 35 U.S.C. § 112. Applicants have amended the claims in response to the rejections. Withdrawal of the § 112 rejections is respectfully requested.

**The Section 102 Rejection**

Claims 1-12 were rejected under 35 U.S.C. § 102(b) as being anticipated by Chartrand (2,426,388). The Office Action noted that:

Chartrand shows a dental tray 21 comprising a base having a plurality of prongs, the base having at least one opening 23 therethrough, a first wall extending from one side of the base, the first wall having at least one opening 23 therethrough, an(d) at least one detachable portion 20 formed on one end of one prong, the detachable portion being removable to shorten the prong length. As to claims 2 and 3, note that the detachable portion and the first wall are curved to eliminate sharp edges and corners, as can be seen in Figure 6. As to claim 7, note that the tray includes a second wall which has openings therethrough. As to claim 9, note that the tray may be made of lead (column 3, last line), which is inherently

radiopaque, as evidenced by Chandra (5,935,638) in column 3, lines 57-62. As to claims 10 and 11, the prongs are interconnected by an arcuate portion which includes a plurality of openings therethrough. As to claim 12, the tray is considered to be capable of being positioned in a radiographic scanner and it has been held that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Chartrand relates to an adjustable tray for use in making an impression of an alveolar ridge. However, Chartrand's adjustable tray fails to disclose at least the claimed tearable portion being detachable or removable to shorten the prong length. As noted in Col. 3, lines 50-54, saddle-like extensions 20 are slotted longitudinally as at 23, and screws 25 secured to the tray and engaged by nuts 26 extend through the slots and provide means for adjustably securing the said extensions to the tray. In contrast, a user of the present invention can simply tear off the excess length to fit a patient.

Since at least one element is missing, the Section 102 rejection is improper. Withdrawal of the § 102(b) rejection is respectfully requested.

### **The Section 103 Rejections**

Claims 13-20 were rejected under 35 U.S.C. § 103 as being unpatentable over Chartrand (2,426,388) in view of Halverson et al (4,763,791). The Office Action noted that:

Chartrand appears to show only a lower tray. Halverson shows an impression kit having both upper and lower trays. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the tray of Chartrand in kit form comprising both upper and lower trays, in view of Halverson, because usually impressions are needed for both the upper and lower jaws. As to claim 18, Halverson also includes a container for holding the trays. It would have also been obvious to one of ordinary skill in the art to provide the system with a container so that all the components needed to take an impression are stored

together and stay easily accessible. As to claims 19 and 20, the specific components of the scanner cannot be given patentable weight because the scanner is not positively claimed.

Halverson relates to a dental impression kit to assist the dentist or a dental technician in the making of dental impressions preparatory to the formation of a mold and the manufacture of a crown or full or partial dentures. The kit contains a compact and orderly arranged array of items necessary or desirable in formation of dental impression. Such items include a selection of upper and lower dental impression trays, dental impression material base and catalyst, adhesive, polish, instructions and a mixing pad. From the kit, the dentist is able to select the appropriate type and size of impression tray, mix the impression base and material on a mixing pad, prepare the tray with the adhesive and then fill it with the impression material and take the dental impression, all the while having instructions at hand if necessary.

As discussed above, Chartrand fails to show the tearable portion being detachable or removable to shorten the prong length. Halverson also fails to show such tearable portion being detachable or removable to shorten the prong length.

Applicant notes that the present rejection does not establish *prima facie* obviousness under 35 U.S.C. § 103 and M.P.E.P. §§ 2142-2143. The Examiner bears the initial burden to establish and support *prima facie* obviousness. *In re Rinehart*, 189 U.S.P.Q. 143 (CCPA 1976). To establish *prima facie* obviousness, three basic criteria must be met. M.P.E.P. § 2142. First, the Examiner must show some suggestion or motivation, either in the Chartrand reference or in the knowledge generally available to one of ordinary skill in the art, to modify the reference so as to produce the claimed invention. M.P.E.P. § 2143.01; *In re Fine*, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Secondly, the Examiner must establish that there is a reasonable expectation of success for the modification. M.P.E.P. § 2142. Thirdly, the Examiner must establish that the prior art

references teach or suggest all the claim limitations. M.P.E.P. §2143.03; *In re Royka*, 180 U.S.P.Q. 580 (CCPA 1974). The teachings, suggestions, and reasonable expectations of success must be found in the prior art, rather than in appellant's disclosure. *In re Vaeck*, 20 U.S.P.Q.2d 1438 (CAFC 1991). Applicants respectfully submit that a *prima facie* case of obviousness has not been met because the Examiner's rejection fails on at least two of the above requirements, namely that all claim limitations are met, there is motivation to combine, and that there is motivation to combine. Withdrawal of the rejection is requested.

Claims 21-23 were rejected under 35 U.S.C. § 103 as being unpatentable over Chartrand (2,426,388) in view of Halverson et al (4,763,791) as applied to claim 18 above, and in further view of Bublewitz et al. (2002/0156186). The Office Action noted that:

Chartrand does not disclose the specific composition of the impression material. Bublewitz discloses an impression material comprising a radiopaque material (paragraph 0112) and PVS (paragraph 0109). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an impression material containing a radiopaque material and PVS, as taught by Bublewitz, in the impression tray of Chartrand, so that the impression may be scanned to form a digital model of the mouth.

Bublewitz relates to a multi-component system for making impressions which contains (a) at least one compound having at least two alkenyl groups; (b) at least one organohydrogenpolysiloxane; (c) at least one hydrosilylation catalyst; characterized by containing (d1) at least one polymeric compound having at least one alkynyl group and/or (d2) at least one compound having at least one Si--OR structural unit, wherein R=H, alkyl, alkoxyalkyl or acyl; and when a compound (d2) having at least one Si--OR structural unit is contained, (e) at least one condensation catalyst and/or condensation cross-linking agent.

Applicants respectfully submit that a *prima facie* case of obviousness has not been met because the Examiner's rejection fails on at least two of the above requirements, namely that all

claim limitations are met, and that there is motivation to combine Bublewitz to arrive at claims 21-23. Withdrawal of the rejection is requested.

Claim 24 was rejected under 35 U.S.C. § 103 as being unpatentable over Chartrand (2,426,388) in view of Halverson et al (4,763,791), and Bublewitz et al. (2002/0156186) as applied to claim 21 above, and in further view of Jagmin (5,044,955). The Office Action noted that:

The radiopaque material of Bublewitz is mixed in the impression material, not coated on the surface. Jagmin teaches that a radiopaque material may be sprayed on a surface to make the surface more visible to X-ray (column 4, lines 11-25). It would have been obvious to spray a radiopaque layer on the impression formed by the impression tray of Chartrand, in view of Jagmin, so that a common impression material may be used and the impression can be made visible to a scanner if so desired.

Jagmin relates to a personal information carrier (10) having a radiographically readable code (12) uniquely identifying a person which is installed in a cavity (34) in the side (30) of the person's tooth (32) which is then filled with a radiolucent composite filler (50) to protectively seal the carrier (10) within the cavity (40). Detecting the location of a missing child is achieved by using a filler (50) which matches the color of the surrounding tooth surface (30) to conceal the presence of the personal information carrier (10) from a potential kidnapper and distributing the code (12) of the missing child to the authorities and professional dental community. Amnesics and corpses are also identified by radiographically reading the carrier (10) and comparing the code (12) to a list of codes (12) of missing persons which are listed in alphanumeric order.

Again, Applicants respectfully submit that a *prima facie* case of obviousness has not been met because the Examiner's rejection fails on at least two of the above requirements, namely that

all claim limitations are met, and that there is motivation to combine. Withdrawal of the rejection is requested.

Applicants have amended the claims in response to the rejections. Withdrawal of the § 103 rejections is respectfully requested.

### **The Drawing Rejections**

Applicants have amended the specification and drawings in response to the drawing rejections. As an appendix to this response, seven sheets of formal drawings labeled "Replacement Sheet," which include corrections to typographical errors, are attached. No new material has been added. Withdrawal of the drawing rejections is respectfully requested.

### **The Information Disclosure Statement**

The information disclosure statement filed November 19, 2003 was resubmitted on August 11, 2004. Copies of the foreign patents cited in the information disclosure statement were included with that resubmission, and the information disclosure form was amended to correct typographical errors. Consideration of the information referred to therein is respectfully requested.

### **CONCLUSION**

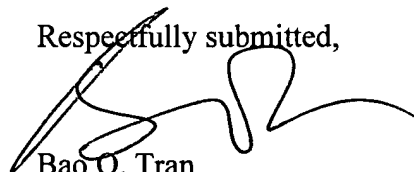
In view of the foregoing, Applicants believe that the specification, drawings and all claims now pending in this Application are in condition for allowance. Applicant requests entry of the amendments to the specification and drawings which correct typographical errors only. No new material has been added.

The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If for any reason the Examiner believes that a telephone conference would in any way expedite prosecution of the subject application, the Examiner is invited to telephone the undersigned at 408-470-1243.

Please charge any required fees to Deposit Account No.: 50-1399.

Respectfully submitted,



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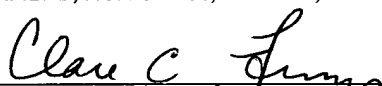
**Dated: October 11, 2004**

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:  
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On October 12, 2004

By: \_\_\_\_\_



Clare C. Finney  
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